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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,134	01/25/2002	Satoshi Tazaki	020085	8160

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EXAMINER

DICUS, TAMRA

ART UNIT PAPER NUMBER

1774

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/030,134

Applicant(s)

TAZAKI, SATOSHI

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The claim objection is withdrawn due to Applicant's arguments. The 102(e) is withdrawn.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5-6, 8 and 12 are rejected under 35 U.S.C. 103(a) as obvious over USPN 6,069,196 to Akao et al.

Akao teaches a molded article which is also a container body for a photographic film formed of a polyethylene resin composition and an alicyclic carboxylic acid amide compound of a divalent or polyvalent aliphatic amine, or a combination thereof (equivalent to an alicyclic structure-containing polymer) as in patented claim 12. The molded article contains an ink pattern as Akao expresses at col. 30, lines 22-28 stating the molded article may be provided with letters and marks with print (equivalent to ink layer of dots or lines) in order to improve the value as commercial goods. The ink used for printing them can be selected from harmless inks to photosensitive materials among conventional inks for offset printing, inks for gravure printing or UV inks. Akao continues to explain at col. 30, lines 28-56, the ink composition is of acrylic resins, meeting instant claim 5.

At col. 14, lines 6-15, the ink functions as a light-shielding material by including inorganic pigments and metal powders. Such ink is a functional equivalent of the "light-reflecting" property as expressed in instant claim 6. See also col. 29, lines 40-45.

While Akao does not expressly disclose the retention selection subjected to tape peeling adhesion test having a value of at least 80% as recited in instant claim 1, it has been held that an element that is "being able to" perform a function (e.g. a 1-cm<sup>2</sup> selection subjected to tape peeling adhesion) is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchinson*, 69 USPQ 138. Moreover, any property instantly claimed (e.g. peeling adhesion of at least 80% and index of wetting of at most 42 dyne/cm-instant claims 3 and 12) is an inherent property as the same materials are used, absent any evidence of the contrary.

4. Claims 4 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,069,196 to Akao et al. in view of USPN 5,437,926 to Takahashi et al.

5. Akao essentially teaches the claimed invention, as explained above. Akao does not teach the alicyclic structure being a norbornene polymer (claim 9), that it is a hydrogenated ring-opening polymer of a norbornene monomer (claim 10), composed of a tetracyclododecene or dicyclopentadiene (claim 11). However, Takahashi teaches a molded article having the aforementioned norbornene type polymer structure at col. 3, lines 30-45, col. 4, lines 1-55, col. 5, lines 5-10, and col. 8, lines 55-50. Hence, it would have been obvious to one of ordinary skill in the art to modify the molded article of Akao to include a norbornene polymer of a dicyclopentadiene type polymer because

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Takahashi teaches such polymers are used for molded or formed material making it possible to form a hard coat layer having greatly improved adhesion strength to a surface of thermoplastic saturated norbornene polymer molded article at col. 3, line 24- col. 4, line 50.

6. Akao does not teach an ink layer is at most 100 microns as instant claim 4.

However, it would have been obvious to one of ordinary skill in the art to produce a thickness of an ink layer that is at most 100 microns, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272. Thickness of an ink layer effects the print quality.

7. Claims 1 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,069,196 to Akao et al. in view of JP Abstract 08-094852 to Hironobu.

8. Akao essentially teaches the claimed invention, as explained above. Akao does not teach the invention used a light guide for back light in a liquid crystal display (LCD). However, Hironobu teaches a light transmission plate for LCDs where the plate is of a thermoplastic norbornene based resin since the resin has high transparency, optical uniformity and excellent heat and moisture resistance as taught in the abstract of Hironobu. Hence, it would have been obvious to one of ordinary skill in the art to modify the molded article of Akao to further use it as a light guide for LCDs since Hironobu teaches a suitable functional equivalent for the purpose of providing high transparency, optical uniformity and excellent heat and moisture resistance as taught in the abstract of Hironobu.

***Response to Arguments***

10. Applicant's arguments filed 12-29-03 have been fully considered but they are not persuasive. Applicant argues an alicyclic structure-containing polymer is not taught by Akao because alicyclic carboxylic acid does not polymerize. The Examiner does not agree. An alicyclic structure-containing polymer is indeed taught in patented claim 12 of Akao. The patented claim details a polyethylene resin composition including an alicyclic carboxylic acid. Therefore an alicyclic structure-containing polymer is included in the resin and reads on the instant claim as written.

11. Applicant argues no motivation exists to combine Akao and Takahashi because a hard coat layer of Takahashi is not a patterned ink layer as instant claim 1. The Applicant has not persuasively argued. Col. 3-4 and col. 5, lines 1-5 of Takahashi teaches a molding of the same alicyclic and norbornene polymer as instant claim 1 recites. Within the columns, Takahashi explains the structures are ring opening (esp. col. 4, lines 45) contrary to Applicant's argument.

12. Applicant alleges Hironobu does not teach a light guide for back light or in combination with Akao appears to argue against substitution. Hironobu was not used to teach a substitution, but to teach the motivation for modifying the molding article of Akao to use the article as a light guide for LCDs since Hironobu teaches a suitable functional equivalent for the purpose of providing high transparency, optical uniformity and excellent heat and moisture resistance as taught in the abstract of Hironobu. To instant claim 7, the Examiner erroneously left out the number in the rejection statement, but addressed the claim limitations, therefore it is now included as set forth above.

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### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 12, 2004

[tld]

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